

***Allowable Subject Matter***

1. Claims 1-20, 26-30 are allowed.

The following is an examiner's statement of reasons for allowance:

The allowability of the independent claims resides, at least in part, in that closest prior art of record Diard (US Patent 7,075,541) does not disclose or suggest, alone or in combination, of parallel execution units, and each IPE is configured to distribute a first portion of the island data set representing first constraint rows of the collection of data matrices between the plurality of the execution units, so that a first portion of the first constraint rows associated with a first common object of the island data set is distributed to a first execution unit and a second portion of the first constraint rows associated with a second common object of the island data set is distributed to a second execution unit; wherein each one of the plurality of execution units resolves a data portion of the first constraint rows derived from the island data set in parallel and resolves a data portion of second constraint rows representing a portion of the collection of data matrices serially, the second constraint rows being associated with both the first common object and the second common object and wherein the LCP solver comprises a plurality of execution units resolving the plurality of LCP's in parallel by distributing constraint rows of the data matrices that do not include a competing object pair to the plurality of execution units for processing in parallel and distributing constraint rows of the data matrices that do include a competing object pair to the plurality of execution units for serial processing, in combination with the other elements and features of the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kideba Bahta whose telephone number is 571-272-3737. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kideba Bahta/

Primary Examiner, Art Unit 2123

